Under the Paperwork Reduction Act of TRANSMITTAL FORM (to be used for all correspondence after in		U.S. Pate s are required to respond to a collect Application Number Filing Date First Named Inventor Art Unit Examiner Name Attorney Docket Number	not and Tracion of information 10/08 Febru De et 2661 Robe	demark Office mation unless 30,022 Jary 21, 2 al.	ce; U.S. (ss it displ	PTO/SB/21 (04-04) igh 07/31/2006. OMB 0651-0031 DEPARTMENT OF COMMERCE avs a valid OMB control number.
Total Number of Pages in This Submission	I-2-0173.6US					
	ENCL	OSURES (Check all tha	it apply)		A II	ance communication
Fee Transmittal Form Fee Attached Amendment/Reply After Final Affidavits/declaration(s) Extension of Time Request Express Abandonment Request Supplemental Information Disclosure Statement Certified Copy of Priority Document(s) Response to Missing Parts/ Incomplete Application Response to Missing Part under 37 CFR 1.52 or 1.5	Remark	Orawing(s) Licensing-related Papers Petition Petition to Convert to a Provisional Application Power of Attorney, Revocation Change of Correspondence Addi Ferminal Disclaimer Request for Refund CD, Number of CD(s)		App of App (App (App Pro	peal Co Appeals peal Co peal Not prietary atus Lett ner Encl ntify bel	osure(s) (please ow):
SIGI	ATURE O	F APPLICANT, ATTORN	IEY, OR	R AGENT	•	
Firm or Individual name Volpe and Koenig Signature Wisherm	P.C.	Re	eg. No. {	51,464		
Date February 8, 2006						
I hereby certify that this correspondence is sufficient postage as first class mail in an VA 22313-1450 on the date shown below	being facsim	ATE OF TRANSMISSION ille transmitted to the USPTO or ressed to: Mail Stop Amendmen	deposited	d with the l	Jnited S Patents	States Postal Service with s, P.O. Box 1450, Alexandria
Typed or printed name Michael L.	_					

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Our File: I-2-0173.6US

February 8, 2006

Date:



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the **PATENT APPLICATION** of:

De et al.

Application No.: 10/080,022

Confirmation No.:

1393

Filed:

February 21, 2002

For:

SINGLE USER DETECTION USER

EQUIPMENT

Group:

2661

Examiner:

Robert W. Wilson

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT INCLUDING RULE 1.704(d) STATEMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Further to Applicants' Duty of Disclosure pursuant to 37 C.F.R. §1.56, Applicants wish to bring to the Examiner's attention the material cited on the enclosed PTO-1449 form. Newly cited documents are indicated by an asterisk (*).

Pursuant to 37 C.F.R. §1.98(a)(2)(ii), copies of the newly cited U.S. publications and/or patent documents have not been included.

In the spirit of Rule 1.704(d), the undersigned certifies that each newly cited item of information contained in this Supplemental Information Disclosure Statement was cited in a communication in a counterpart U.S. application, and that this communication was not received by any individual designated in §1.56(c) more than

Applicant: De et al. Application No.: 10/080,022

thirty (30) days prior to the filing of the supplemental information disclosure statement.

It is respectfully requested that the Examiner consider these documents and return an initialed copy of the PTO-1449 form indicating his/her consideration of the cited materials.

Respectfully submitted,

De et al.

By

Michael L. Berman Registration No. 51,464

(215) 568-6400

Volpe and Koenig, P.C. United Plaza, Suite 1600 30 South 17th Street Philadelphia, PA 19103

MLB/ks Enclosure FEB 1 0 2006

MARKET STATE		FORM PTO-1449		ATTY. DOCKET NO. I-2-0173.6US		SERIAL N 10/080,0	
	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		APPLICANT De et al.				
	INFORMATION DISCLOSURE STATEMENT BY APPLICANT		FILING DATE February 21, 2002		GROUP 2661		
	(Use several sheets if necessary)						
			U.S. PATENT	DOCUMENTS			
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	*	5,157,688	10/1992	Dell-Imagine Dell-Imagine			
		5,337,226	12/1994	Davis			
		5,377,225	12/1994	Davis			
	*	5,477,225	12/1995	Young et al.			
	-	5,648,983	07/1997	Kostic et al.			
	*	6,064,689	05/2000	Vollmer et al.			
	*	2002/0126619	09/2002	De et al.			
	*	2002/0126646	09/2002	De et al.			
	*	2002/0131383	09/2002	De et al.			
	*	2002/0136160	09/2002	De et al.			
	*	2002/0141366	10/2002	De et al.			
	*	2002/0141372	10/2002	De et al.	1		
	*	2002/0141373	10/2002	De et al.			
	*	2002/0154599	10/2002	De et al.			
	*	2002/0154619	10/2002	De et al.			
	*	2002/0159383	10/2002	De et al.			
	*	2002/0159428	10/2002	De et al.			
		OTHER DOCUMENT	S (Including Au	thor, Title, Date, Pertinent Pag	es, Etc.)		
		Ramjee Prasad, Werner Mohr and Walter Konhauser editors, <i>Third Generation Mobile Communication Systems</i> , Artech House, Boston, 2000.					
		Anja Klein, Ghassan Kawas Kaleh and Paul Walter Baier, "Zero Forcing and Minimum Mean-Square Error Equalization for Multiuser Detection in Code-Division Multiple-Access Channels", <i>IEEE Trans. on Vehicular Technology</i> , Vol.45, No. 2, pp. 276-287, May 1996.					
		Naja Klein, "Data Detection Algorithms Specially Designed for the Downlink of CDMA Mobile Radio Systems", IEEE 47th Vehicular Technology Conference, pp. 203-207, May 1997.					

EXAMINER	DATE CONSIDERED

SERIAL NO.	ATTY. DOCKET NO.	FORM PTO-1449		
10/080,022	I-2-0173.6US	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		
APPLICANT De et al.				
GROUP	FILING DATE	INFORMATION DISCLOSURE STATEMENT BY APPLICANT		
2661	February 21, 2002	(Use several sheets if necessary)		
		(Ose several silects if fieldssary)		
Pages, Etc.)	rthor, Title, Date, Pertinent Pag	OTHER DOCUMENTS (Including A		
nmunications PIMRC' 98, Conference		H.R. Karimi and N.W. Anderson, "A No Approximate Cholesky Factorization", <i>Pers</i> Proceedings, Vol. 3		
	w Cost MMSE-BLE-SD Algorith ITS L1, Helsinki, Finland, Sept	ETSI STC SMG2 Layer 1 Expert Group, "Lo Tdoc SMG2 UI		
3G TS 25.102 V3.4.0, 2000-10, "UTRA (TDD) Radio Transmission and Reception", 3rd Generation Partnership Project, Technical Specification Group RAN WG4, Annex B., pp. 37.				
Lang Tong; Guanghan xu; Kailath T: "Blind identification and equalization based on second -order statistics: a time domain approach", IEEE Trans. Inf. Theory (USA), IEEE Transactions on Information Theory, March 1994, USA, ISSN 0018-9448, VOL-40, NR 2, pages 340-349				
e. Gateway to the 21st Century	ular Technology Conference.	Benvenuto N. et al. "Joint Detection With VTC 1999-Fall. IEEE VTS 50th. Vehi Communications Village. Amsterdam, S		
		Vandaele P. et al. "Recursive Total Least S Proceedings: Vision, Image and Signal Pro		
		Yang et al., "Fast Joint Detection with Cy International Conference on Acoustics,		
ny, New York, NY, 1992, p. 835, para.	acmillan Publishing Company, 3.1, p. 890, para. 12.3.2	Proakis et al., "Digital Signal Processing", N		
		Vollmer et al., "Joint-Detection Using Fast International Annual Conference of ICT, 19		
		Pigeonnat, "Alternative Solutions for Joint Signal Processing Workshop on Signal Pr		
ip	9, pp. 1-7, p. 1, para. 1, p. letection in TD/CDMA Mult	Pigeonnat, "Alternative Solutions for Joint Signal Processing Workshop on Signal Pr		

EXAMINER	DATE CONSIDERED